CONFERENCE PROGRAM

Thursday – 15.11.2018

Location: Romanian Academy – Aula of the Romanian Academy

14.30 – 15.00 **Opening Ceremony**

15.00 – 17.00

Chairpersons: *Ioan DUMITRACHE, Ovidiu-Alexandru BAJENARU*

15.00 – 15.30 **The organization of parietal-frontal sensorimotor networks in primate brains**
John H. KASS

15.30 – 16.00 **Neuroimaging correlates of cognitive and behavioral dysfunction in Parkinson's disease**
Angelo ANTONINI

16.00 – 16.30 **I think therefore I am**
Karl J. FRISTON

16.30 – 17.00 *Discussions / Coffee Break*

17.00 – 19.00

Chairpersons: *Luiza FLONTA, Dafin Fior MURESANU*

17.00 – 17.30 **Exosomes-biological nanoparticles for the treatment of neurological disease and injury**
Michael CHOPP

17.30 – 18.00 **Prism Adaptation Test (PAT) - A new quantitative test of cerebellar motor learning**
Hidehiro MIZUSAWA

18.00 – 18.30 **Insoluble proteins and neurodegeneration: Deposition and transmission**
Nobuyuki NUKINA

18.30 – 19.00 *Discussions / Round Table*

19.00 – 21.00 ***Cocktail***

CONFERENCE PROGRAM

Friday – 16.11.2018 Morning session

Location: Romanian Academy – Aula of the Romanian Academy

09.00 – 11.00

Chairpersons: *Bogdan-Ovidiu POPESCU, Cristina TIU*

09.00 – 09.30 **Using machine learning, phenotypic assays and biochemical profiling to identify drug targets and anti-targets to promote axonal sprouting and regeneration**
Vance P. LEMMON

09.30 – 10.00 **Brain connectomics: From Cajal to present**
Javier DEFELIPE

10.00 – 10.30 **Visual perception in the neurocognitive functions of the human brain**
Ovidiu BAJENARU

10.30 – 11.00 *Discussions / Coffee Break*

11.00 – 13.00

Chairpersons: *Simona CARAMIHAI, Leon ZAGREAN*

11.00 – 11.30 **Impact of virtual embodiment on sensory and motor processing**
Mavi SANCHEZ-VIVES

11.30 – 12.00 **Repairing the brain with brain-machine interfaces**
Mikhail LEBEDEV

12.00 – 12.30 **The emergence of the mind**
Ioan OPRIS

12.30 – 13.00 *Discussions*

CONFERENCE PROGRAM

Friday – 16.11.2018 – Afternoon session

Location: Romanian Academy – Aula of the Romanian Academy

13.00 – 15.00 **Lunch Break**

15.00 – 17.00

Chairpersons: *Adina ROCEANU, Athena RIBIGAN*

15.00 – 15.30 **Probing awareness using EEG reactivity measures**
Mihai MOLDOVAN

15.30 – 16.00 **Computing the complexity of a language processing unit**
Ioan Mihai OARA

16.00 – 16.30 **Could brain regeneration be better understood by using anticorrelated processes model?**
Dafin Fior MURESANU

16.30 – 17.00 *Discussions / Coffee Break*

17.00 – 19.00

Chairpersons: *Ioana MANDRUTA, Mihai MOLDOVAN*

17.00 – 17.30 **Neuroplasticity of cognitive networks in patients with temporal lobe epilepsy. A multimodal and integrative approach**
Monica BACIU

17.30 – 18.00 **Population synchrony in cortical networks**
Valentin DRAGOI

18.00 – 18.30 **What's still wrong with the "GOFAI" ?**
Mircea DUMITRU

18.30 – 19.00 *Discussions / Round Table*

20.00 – 23.00 ***Gala Dinner***

CONFERENCE PROGRAM

Saturday – 17.11.2018

Location World Trade Center – New York Hall

09:00 – 11:00 Parallel Session 1 Parallel Session 2

11.00 – 11.30 *Coffee Break*

11.30 – 12.00 **Hari Shanker SHARMA: Novel therapeutic strategies using nanomedicine**

12:00 – 14:00 Parallel Session 3 Parallel Session 4

14.00 – 15.00 *Closing Ceremony*

Parallel Session 1

09:00 – 10:40

Chairpersons: *Ioan DUMITRACHE, Simona CARAMIHAI*

09:00 – 09:20 **Reading into the mind's eye: Automatic recognition of visual classes from EEG brain signals**
Nicolae CUDLENCO, Nirvana POPESCU, Marius LEORDEANU

09:20 – 09:40 **Hybrid system for deep learning**
Mihaela MALITA, ***Gheorghe M. STEFAN,*** *Gheorghe Vlad POPESCU*

09:40 – 10:00 **Modelling natural neural structures and processes with artificial neural networks**
Horia-Nicolai TEODORESCU

10:00 – 10:20 **InTool Explorer, a new interactive exploratory data analysis tool in neuroscience**
D. FURCILA, *N.C. TOADER, M. GARCÍA, J. MORALES, A. RODRIGUEZ, L. PASTOR, J. DEFELIPE, L. ALONSO-NANCLARES*

10:20 – 10:40 **A new framework for human perception modelling**
Ioan DUMITRACHE, *Simona CARAMIHAI, Octavian ARSENE, Mihnea MOISESCU, Ioan SACALA*

10:40 – 11:00 *Discussions*

11:00 – 11:30 *Coffee Break*

11:30 – 12:00 **Novel therapeutic strategies using nanomedicine**
Special invited lecturer Hari Shanker SHARMA

Parallel Session 2

09:00 – 12:00

Chairpersons: *Ioana MINDRUTA, Florina ANTOCHI*

09:00 – 09:20 **Neurobiological mechanisms of neuropathic pain**
Mihai VASILE, *Mihai Radu IONESCU, Ovidiu Alexandru BAJENARU*

09:20 – 09:40 **Neurovascular coupling – from bench to bed, and backwards**
Cristina TIU, *Florina ANTOCHI, Ovidiu BAJENARU*

09:40 – 10:00 **FollowMe – ICT solution supporting patients diagnosed with cognitive impairment and their caregivers**
Raluca BADEA, *Florina Anca ANTOCHI, Athena RIBIGAN*

10:00 – 10:20 **The use of digital technology as a tool for monitoring patients with multiple sclerosis**
Athena Cristina RIBIGAN, *Florina Anca ANTOCHI, Ovidiu Alexandru BAJENARU*

CONFERENCE PROGRAM

Saturday – 17.11.2018

Location World Trade Center – New York Hall

10:20 – 10:40 **Impact of intracellular chloride on neuronal viability in in-vitro and in-vivo ischemia/asphyxia and reoxygenation models in rat**
Ana-Maria ZAGREAN, *Mihai CEANGA, Ioana Florentina GRIGORAS, Mara Ioana IESANU, Diana Maria CHITIMUS, Bogdan IANOSI, Rosana-Bristena IONESCU, Robert Mihai HARET, Anca Maria PANAITESCU, Andrei ILIE, Leon ZAGREAN*

10:40 – 11:00 **Brain cleaning systems and neurodegeneration**
Bogdan Ovidiu POPESCU

11:00 – 11:30 *Coffee Break*

11.30 – 12.00 **Novel therapeutic strategies using nanomedicine**
Special invited lecturer Hari Shanker SHARMA

Parallel Session 3

12:00 – 13:40

Chairpersons: *Ana Maria ZAGREAN, Aurel Popa WAGNER*

12:00 – 12:20 **Brain connectivity during wakefulness and sleep studied through direct electrical stimulation in patients with focal epilepsy**
Anca Adriana ARBUNE, *Andrei BARBORICA, Ioana MINDRUTA, Irina POPA, Mihai MALAIA, Andrei DANEASA, Jean CIUREA, Alin RASINA, Cristian DONOS, Ovidiu Alexandru BAJENARU*

12:20 – 12:40 **Human brain networks underlying illusory own body perceptions during high frequency stimulations of the cingulate gyrus – a SEEG study**
Irina POPA, *Andrei BARBORICA, Julia SCHOLLY, Cristian DONOS, Fabrice BARTOLOMEI, Stanislas LAGARDE, Edouard HIRSCH, Maria-Paola VALENTI-HIRSCH, Mihai MALAIA, Anca Adriana ARBUNE, Andrei DANEASA, Jean CIUREA, Ovidiu-Alexandru BAJENARU, Ioana MINDRUTA*

12:40 – 13:00 **Intracerebral high frequency stimulation for the mapping of brain functions and connectivity**
Ioana MINDRUTA, *Andrei BARBORICA, Jean CIUREA, Irina POPA, Mihai MALAIA, Andrei DANEASA, Anca ARBUNE, Ovidiu BAJENARU*

13:00 – 13:20 **Stem cell therapy of stroke. Is the aged brain microenvironment refractory to tissue repair and functional re-organization?**
Aurel Popa WAGNER

13:20 – 13:40 **Towards direct and precise measurement of neurochemicals in psychiatry and neuroscience: Simultaneous spectral editing of GABA and glutathione with Hermes**
Diana G. ROTARU, *David J. LYTHGOE*

CONFERENCE PROGRAM

Saturday – 17.11.2018

Location World Trade Center – New York Hall

Parallel Session 4

12:00 – 14:00

Chairpersons: *Alexandru BABES, Violeta RISTOIU*

12:00 – 12:20 **Controlling microglia mobility via interactions with the cytoskeleton**
Alexandru DEFTU, Roxana GHEORGHE, Andreea GROSU, Alexandru FILIPPI, Gabriela CHIRITOIU, Elena BURLACU, ***Violeta RISTOIU***

12:20 – 12:40 **Temperature sensitive transient receptor potential channels and human painful photosensitivity**
Alexandru BABES

12:40 – 13:00 **The mechanosensitive Piezo1 ion channel is expressed in peripheral glial cells**
Tudor SELESCU, *Roxana GHEORGHE, Dan DOMOCOS, Violeta Maria CARAGEA, Earl CARSTENS, Alexandru BABES*

13:00 – 13:20 **Blood brain barrier permeabilization in epileptogenesis is due to cytoskeleton remodelling and adhesion molecules upregulation**
Antonia Teona DEFTU, *Calin Mircea RUSU, Roberta STOICA, Monica Ioana TUDOR, Mihaela BACALUM, Cosmin Catalin MUSTACIOSU, Flavia MERIGO, Mihai RADU, Paolo Francesco FABENE, Beatrice Mihaela RADU*

13:20 – 13:40 **The object space task for mice**
Violeta Maria CARAGEA, *Violeta RISTOIU, Lisa GENZEL*

13:40 – 14:00 **Consciousness, as an emergent process**
Gabriel CRUMPEI, *Alina GAVRILUT, Maricel AGOP*

14:00 – 15:00 ***Closing Ceremony***